REMARKS

In response to the above-identified Office Action ("Action"), Applicants traverse the Examiner's rejection of the claims and seek reconsideration thereof. Claims 1-23 are now pending in the instant application. In this response, no claims are added, claim 7 is amended and no claims are cancelled.

I.   Claim Amendments

Applicants respectfully submit herewith amendments to claim 7 in which the limitation of "at an operating system level" is recited. As noted by the Examiner, this limitation was mentioned in the previous response, however, inadvertently omitted from the amended claim set. Applicant respectfully acknowledges the Examiner's consideration of the amendment in the outstanding Action despite its omission. Applicants respectfully submits the amendment does not add new matter and is supported by the specification therefore consideration and entry of the amendment to claim 7 is respectfully requested.

II.   Claim Rejections – 35 U.S.C. §102(b)

In the outstanding Action, claims 17 and 19 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U. S. Patent No. 6,219,742 issued to Stanley ("Stanley"). Applicants respectfully traverse the rejection.

It is axiomatic that to anticipate a claim, every element of the claim must be disclosed within a single reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, the reference must disclose the identical invention in as complete detail as is found in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

In regard to claim 17, Stanley fails to teach at least the element of "an operating system module executed by the processor to identify a system resource that generates an interrupt and register a device driver to manage the system resource" as recited in claim 17.

The Examiner alleges col. 11, lines 12-15 discloses this element. In particular, the Examiner alleges that the General Purpose Event handler determines which system resource has signaled the event and in turn the System Control Interrupt . See Action, pages 10-11. Applicants respectfully disagree with the Examiner's characterization of this portion of the reference.

Specifically, this portion teaches that "[t]he handler determines which device object has signaled the event and performs a Notify operation on the corresponding device object(s) that have asserted the event. In turn, the OS notifies the OS native driver(s) to service each device that has asserted Wake." See Stanley, col. 11, lines 12-15. Nowhere within this portion of Stanley is an operating system module that both identifies system resources that generate interrupts and registers a device driver to manage those system resources explicitly recited. Although Stanley discloses a "Notify operation", a "Notify operation" does not teach the element of "register a device driver to manage the system resource" as further recited in claim 17. Applicants respectfully request the Examiner particularly point out where within Stanley each of these elements are taught, especially an operating system module to both identify a system resource that generates an interrupt and register a device driver to manage the system resource, if the Examiner maintains the rejection.

For at least the foregoing reasons, Stanley fails to teach each and every element of claim 1. Since each of the elements of the claim are not found within the reference, anticipation may not be established. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) as being anticipated by Stanley.

In regard to dependent claim 19, claim 19 depends from claim 17 and incorporates the limitations thereof. Thus, for at least the reasons that claim 17 is not anticipated by Stanley, claim 19 is further not anticipated by Stanley. Applicants respectfully request reconsideration and withdrawal of the rejection to claim 19 under 35 U.S.C. §102(b) as being anticipated by Stanley.

III.   Claim Rejections – 35 U.S.C. §103(a)

A.   In the outstanding Action, the Examiner rejects claims 1, 2, and 4 under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 5,590,312 issued to Marisetty ("Marisetty") in view of U. S. Patent No. 6,148,361 issued to Carpenter et al. ("Carpenter"). Applicants respectfully traverse the rejection.

To render a claim obvious, the relied upon references must disclose every limitation of the claim such that the invention as a whole would have been obvious at the time the invention was made to one skilled in the art. See MPEP §2143. Furthermore, there must be a showing of suggestion or motivation to modify or combine the teachings of those references. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

In regard to claim 1, neither Marisetty nor Carpenter, alone or in combination teach or suggest at least the element of "configuring the resource by the operating system to access the address range" as recited in claim 1. The Examiner alleges Marisetty, col. 7, lines 45-49 and lines 55-56 teach this element. Applicants respectfully disagree.

The portion of Marisetty relied upon by the Examiner to teach this element discloses an application accessing an address range. Applicants respectfully submit an application accessing an address range is not equivalent to "configuring the resource by the operating system to access the address range." In particular, Marisetty teaches a graphics application that accesses VGA address space. The address space is a well known set range. See Marisetty, col. 7, lines 42-45. Thus, no configuration of a resource identified by the operating system is needed for the application to access the VGA address range. Rather, the application would be programmed to access this well known range.

The Examiner has not relied upon, and Applicants are unable to discern a portion of Carpenter curing the deficiencies of Marisetty with respect to this element. Moreover, the excerpt from Wikipedia.org pointed to by the Examiner does not show that operating systems are

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responsible for setting up the memory allocations of various devices. Instead, the excerpt describes an operating system as a software program which performs basic tasks such as controlling and allocating memory. See Wikipedia.org, line 2. Allocating memory is not the same as setting up a resource to access a particular memory range. Rather, the memory allocation referred to is the memory management further discussed on page 2, where the OS manages system memory allotted to running applications.

For at least the foregoing reasons, the references fail to teach or suggest each and every element of claim 1. Since each element of claim 1 is not taught or suggested by Marisetty in view of Carpenter, a *prima facie* case of obviousness may not be established. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Carpenter.

In regard to claims 2 and 4, these claims depend from claim 1 and incorporate the limitations thereof. Thus, for at least the reasons that claim 1 is not obvious over Marisetty in view of Carpenter, claims 2 and 4 are further not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 2 and 4 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Carpenter.

B.   In the outstanding Action, the Examiner rejects claims 3, 5, 6 and 11-13 under 35 U.S.C. 103(a) as being unpatentable over Marisetty in view of Carpenter and further in view of Stanley. Applicants respectfully traverse the rejection.

In regard to claims 3, 5 and 6, these claims depend from claim 1 and incorporate the limitations thereof. Thus, for at least the reasons mentioned in regard to claim 1, Marisetty in view of Carpenter, fails to teach or suggest at least the element of "configuring the resource by the operating system to access the address range" as further found in claims 3, 5 and 6. The Examiner has further not pointed to, and Applicants are unable to discern a portion of Stanley curing the deficiencies of Marisetty and Carpenter with respect to this element. Since each and every element of claims 3, 5 and 6 is not taught or suggested by the references, a *prima facie* case of obviousness may not be established. Applicants respectfully request reconsideration and

withdrawal of the rejection of claims 3, 5 and 6 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Carpenter and further in view of Stanley.

In regard to claim 11, Marisetty in view of Carpenter and further in view of Stanley fails to teach or suggest at least the element of "means for an operating system to configure the resource to access the address range" as recited in claim 11. For reasons similar to those mentioned above in regard to claims 3, 5 and 6, Marisetty in view of Carpenter and Stanley fails to teach or suggest at least this element of claim 11. Since each and every element of claim 11 is not taught or suggested by the references, a *prima facie* case of obviousness may not be established. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 11 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Carpenter and further in view of Stanley.

In regard to claims 12 and 13, these claims depend from claim 11 and incorporate the limitations thereof. Thus, for at least the reasons that claim 11 is not obvious over Marisetty in view of Carpenter and Stanley, claims 12 and 13 are further not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 12 and 13 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Carpenter and Stanley.

C.   In the outstanding Action, the Examiner rejects claims 7-10, 14-16, 18 and 20-23 under 35 U.S.C. 103(a) as being unpatentable over Marisetty in view of Stanley. Applicants respectfully traverse the rejection.

In regard to claim 7, Marisetty in view of Stanley fails to teach or suggest at least the element of "determining the source of the interrupt based on the address access request at an operating system level." The Examiner admits that Marisetty fails to teach or suggest this element and instead relies upon the teachings of Stanley in col. 11, lines 12-15 to cure the deficiencies of Marisetty with respect to this element. See Action, page 6. As previously discussed, however, this portion of Stanley merely teaches a handler to determine which device object signaled an event and performing a notify operation on the device object and OS native

drivers. See Stanley, col. 11, lines 12-15. Nowhere within this portion of Stanley is it expressly disclosed that the source of the interrupt is determined based on "the address access request at an operating system level." If the Examiner maintains the rejection, Applicants respectfully request the Examiner specifically identify where within Stanley each of the elements of claim 7 are taught or suggested. Thus for at least the foregoing reasons, Marisetty in view of Stanley fails to teach or suggest each element of claim 7. Since each of the elements of claim 7 are not found within the references, a *prima facie* case of obviousness may not be established. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 7 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Stanley.

In regard to claims 8-10, these claims depend from claim 7 and incorporate the limitations thereof. Thus, for at least the reasons that claim 7 is not obvious over Marisetty in view of Stanley, claims 8-10 are further not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 8-10 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Stanley.

In regard to claim 14, Marisetty in view of Stanley fails to teach or suggest at least the element of "an operating system level interrupt handler module to receive an interrupt when the address protection module detects an address space access and to invoke the ASL code segment corresponding to the address space access." The Examiner admits Marisetty fails to teach or suggest this element and instead alleges the General Purpose Event handler disclosed in col. 11, lines 5-65, specifically col. 11, lines 5-15, of Stanley teaches this element. See Action, pages 9 and 12-13. Applicants respectfully disagree with the Examiner's characterization.

The General Purpose Event handler discussed in this portion of Stanley is called in response to the setting of a bit in the General Purpose Event register causing a system control interrupt to be asserted. See Stanley, col. 11, lines 5-8. There is no indication that the handler receives an interrupt from an address protection module that detects an address space access. In fact, the Examiner admits Stanley fails to specifically disclose that the handler receives a system control interrupt ("SCI") and instead alleges it would be obvious to one of ordinary skill in the art that the handler must receive the SCI to know when to determine which device object signaled the event and when to perform the Notify operation. See Action, page 13. Applicants

respectfully disagree. Stanley discloses that when a device signals an event and the corresponding bit is enabled, the SCI is asserted. See Stanley, col. 11, lines 5-10. The advanced configuration and power interface then dispatches the corresponding General Purpose Event handler to determine which device object signaled the event and perform the Notify operation. See Stanley, col. 11, lines 11-13. Thus, since the General Purpose Event handler corresponding to the signaled event is dispatched upon signaling of the event, the handler already knows when to identify the device object which signaled the event and perform the Notify operation, i.e., upon dispatch. Thus, for at least the foregoing reasons, the Examiner has not shown that this element, which the Examiner admits Stanley is silent on, would be obvious to one of ordinary skill in the art.

Applicants further submit, even if it were possible to find this element is provided by the references, and Applicants do not believe it is, the combination of the General Purpose Event handler of Stanley with the emulation program of Marisetty would be improper because it would change the fundamental operating principles of Marisetty. See MPEP §2143.01. Marisetty explicitly states that its system is designed to function such that it is transparent to the application of the operating system. See Marisetty, col. 2, lines 61-66. Thus, this makes the SMI interrupt and the SMM handler appropriate for use in the context of Marisetty. The use of an operating system visible interrupt such as SCI interrupt and general purpose event handler disclosed by Stanley would be inappropriate as this would not allow the emulation program of Marisetty to operate transparent to the operating system and, therefore, render it unsuitable for its intended purpose. Therefore, Stanley may not be properly combined with Marisetty to teach this element of claim 14.

Thus for at least the foregoing reasons, Marisetty in view of Stanley fails to teach or suggest each element of claim 14. Since each of the elements of claim 14 are not found within the references, a *prima facie* case of obviousness may not be established. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 14 under 35 U.S.C. §103(a) as being obvious over Marisetty in view of Stanley.

In regard to claims 15 and 16, these claims depend from claim 14 and incorporate the limitations thereof. Thus, for at least the reasons that claim 14 is not obvious over Marisetty in

view of <u>Stanley</u>, claims 15 and 16 are further not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 15 and 16 under 35 U.S.C. §103(a) as being obvious over <u>Marisetty</u> in view of <u>Stanley</u>.

In regard to claim 18, this claim depends from independent claim 17 and incorporates the limitations thereof. Thus, for at least the reasons that claim 17 is not obvious over <u>Marisetty</u> in view of <u>Stanley</u>, claim 18 is further not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 18 under 35 U.S.C. §103(a) as being obvious over <u>Marisetty</u> in view of <u>Stanley</u>.

In regard to claim 20, <u>Marisetty</u> in view of <u>Stanley</u> fails to teach or suggest at least the element of "determining the source of the interrupt based on the address access request at an operating system level" as recited in claim 20. For at least the reasons mentioned above in regard to independent claim 7, claim 20 is not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 18 under 35 U.S.C. §103(a) as being obvious over <u>Marisetty</u> in view of <u>Stanley</u>.

In regard to claims 22 and 23, these claims depend from independent claim 20 and incorporates the limitations thereof. Thus, for at least the reasons that claim 20 is not obvious over <u>Marisetty</u> in view of <u>Stanley</u>, claims 22 and 23 are further not *prima facie* obvious over the references. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 22 and 23 under 35 U.S.C. §103(a) as being obvious over <u>Marisetty</u> in view of <u>Stanley</u>.
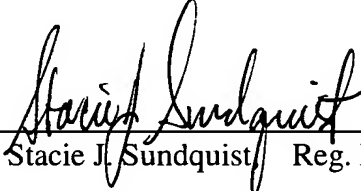
CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely claims 1-23, are now in condition for allowance and such action is earnestly solicited at the earliest possible date. If there are any additional fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. Questions regarding this matter should be directed to the undersigned at (310) 207-3800.

Respectfully submitted,

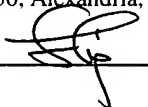BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: October 6, 2006

By: _____

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